

## National Weather Service Storm Data and Unusual Weather Phenomena



Time Local/ Length Width Persons Damage Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

## **HAWAII**

HIZ002>005

Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore

01 0000HST 0 0 Drought

Rainfall amounts were a mixed bag throughout the state. Individuals in some areas may have felt like the enhanced rainfall expected during a La Nina episode was here. Others, especially in the leeward areas of the islands of Maui and Hawaii, continued to see below normal precipitation.

Large scale trade winds continued to play a dominant role in the weather over the Hawaiian Islands in the month of November. The trades were light during the first week of the month but were fairly typical stronger trades for the rest of November.

An upper level trough to the west of the state, however, produced relatively unstable conditions and enhanced shower activity over the islands. Normally, the month of November marks the start of the cool season, with the island chain experiencing the passage of several cold fronts or shear lines. Subtropical cyclones, or kona storms, can also develop west of the isles to generate prolonged periods of heavy rain. During November 1998, only one shear line (the remnant of a cold front) was able to reach the island chain. A band of showers ahead of the shear line produced heavy rain for a brief period along the north sections of windward Oahu. The shear line stalled over the island of Kauai and the Kauai Channel on 11 November before lifting out toward the northeast. Fragments of this shear line, and subsequent remains of shear lines embedded within the trade flow, impacted the islands from the east and northeast over the period from 12 to 20 November. This caused enhanced trade showers, mainly over the windward sections of the isles. In addition to the upper trough mentioned above, other upper air troughs from the east helped enhance shower activity, especially over the islands of Maui and Hawaii during the month.

Below are rainfall statistics for selected locations from around the state. The first column is the rainfall for the month of November. The second has the 30-year average for each location, while the third column is the percent of average rainfall for the month of November.

	November 98	Avg.	%Avg.
Oahu			
Honolulu	0.85	3.0	35
Manoa Arbor.	17.42	13.5	129
Hawaii Kai	1.20	3.0	4 0
Ahuimanu	M	9.9	M
Waianae	0.46	2.0	23
Waialua	1.78	4.2	42
Maui			
Kahului	1.94	2.6	75
Hana	3.13	8.7	36
Kihei	0.00	1.5	0
Lahainaluna	0.36	2.0	18
Wailuku	1.80	2.9	62
Island of Hawaii			
Hilo	15.57	14.5	107
Pahala	1.48	5.5	27
Honaunau (Capt. Cook)	1.51	3.6	42
Kamuela (Upper)	6.91	5.3	13 0
Kamuela	3.54	5.8	61
Laupahoehoe	14.94	13.6	110
Molokai			
Kaunakakai	0.58	1.6	36



HIZ003

Kauai Leeward

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High Wind (52)

November 1998 Path Length (Miles) Time Local/ Path Width Number of Estimated Persons Damage **HAWAII** HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast **High Surf** Storm low far northwest of Hawaii generated surf of 10 to 20 feet along north and west shores of all the islands. All north shore beaches were closed on 11 Nov, and all but Waimea were closed on 12 Nov, due to the high surf. More than 20 surfers and other beachgoers had been rescued by lifeguards before beaches were closed on the 11th. Two people were slightly injured on Oahu's north shore due to high surf on the 8th. **Maui County** 1430HST 2030HST 3 NW Wailuku **17** 0 Urban/Sml Stream Fld Firefighters rescued five hikers who had been stranded in the mountains above Waihee after heavy rain raised stream waters. No injuries were reported. HIZ001>006 Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast 0 0 **High Surf** 26 27 Storm low far north of the state near the Aleutian Islands generated surf of 8 to 15 feet along the north shores of all the Hawaiian islands. Niihau - Kauai Windward - Kauai Leeward - Kauai Mountains - Oahu South Shore - Waianae Coast HIZ001>006 1000HST 1800HST Storm low far northwest of the island chain produced surf of 6 to 10 feet along the north and west shores of all the isles.

> 2000HST 2359HST West to northwest winds of 50 to 60 mph occurred near the summit of Haleakala.